# National Pollutant Discharge Elimination System

Diaperville Stabilization Lagoon

Permit No.: WI-0036544-4

Birch Hill Stabilization Lagoon

Permit No.: WI-0036579-4

Bad River Wastewater Treatment Plant

Permit No.: WI-0036587-4

Public Noticed: April 5, 2013

Public Hearing: August 27, 2013

Response to Comments

November 2013

# Provisions of the Draft Permits That Have Been Changed in the Final Permit Decision

## Diaperville Stabilization Lagoon (WI-0036544-4)

- 1. The treatment system does not have a measuring device to monitor flow "continuously" as stated in the permit. EPA intended a total daily flow be recorded as indicated in the table on page 6 of draft permit WI-0036544-4. The permittee determines influent flow by using lift station pump run times and calibration of the lift station pumps. The permit is being clarified by changing the Measuring Frequency from "continuous" to "daily" in the table on page 6 and the word "continuously" to "daily" in note (b) on page 6. EPA believes that this method of determining influent flow is accurate and sufficient, and this clarification does not substantively alter the permit conditions, nor make the permit less protective.
- 2. Note (f) on page 7 has been rewritten as follows:
  - f. Flow will be calculated daily using lift station pump run times and calibration of the lift station pumps. Calibration of the pumps shall occur at least annually.
- 3. The final permit will become effective 30 days from the date of signature, unless a petition for appeal is made under 40 C.F.R. § 124.19.

## Birch Hill Stabilization Lagoon (WI-0036579-4)

- 1. The treatment system does not have a measuring device to monitor flow "continuously" as stated in the permit. EPA intended a total daily flow be recorded as indicated in the table on page 6 of draft permit WI-0036579-4. The permittee estimates influent flow by using a percentage of water produced at the pumphouse. The permit is being clarified by changing the Measuring Frequency from "continuous" to "daily" in the table on page 6 and the word "continuously" to "daily" in note (b) on page 6. EPA believes that this method of estimating influent flow is sufficient, and this clarification does not substantively alter the permit conditions, nor make the permit less protective.
- 2. The final permit will become effective 30 days from the date of signature, unless a petition for appeal is made under 40 C.F.R. § 124.19.

## Bad River WWTP (WI-0036587-4)

1. Because of concerns raised related to phosphorus discharges and its impact on downstream waters, we have added the following condition to the permit:

## Phosphorus Operational Evaluation Report

By January 31, 2015 and annually thereafter, the permittee shall prepare and submit to the EPA for approval an operational evaluation report. The report shall include an evaluation of collected effluent data, possible source reduction measures, operational improvements or other minor facility modifications that will optimize reductions in phosphorus discharges from the wastewater treatment plant.

- 2. The "Summary of Regular Reporting" table on page 2 of the permit has been updated to include the Phosphorus Operational Evaluation Report.
- 3. The final permit will become effective 30 days from the date of signature unless a petition for appeal is made under 40 C.F.R. § 124.19.

## **Comments and Responses**

Comment 1:

Why EPA is issuing the permit and not Wisconsin?

**EPA Response:** 

The State of Wisconsin has received authority under the Clean Water Act (CWA) to issue permits that meet CWA requirements under its Wisconsin Pollutant Discharge Elimination System program, but the program does not extend to "Indian country" (as defined in 18 U.S.C. §1151), which includes federally recognized Indian reservations, like the Bad River Indian Reservation. The discharges from these three WWTPs are located within the exterior boundaries of the Bad River Indian Reservation. EPA issues permits to both tribal and non-tribal dischargers where the discharge is within the boundaries of a federally recognized Indian reservation.

Comment 2:

Why are we using tribal water quality standards?

**EPA Response:** 

The Tribe received authorization for a water quality standards (WQS) program on June 26, 2009 and subsequent approval of tribal WQS on September 21, 2011. The Tribe's WQS are at least as stringent as federal water quality criteria, and in some instances more stringent. Generally, the federal criteria are what states and tribes use as a basis for developing their own standards. For example, the Tribal standards are the same as the federal Great Lakes Water Quality Criteria for E. coli: a 30-day period shall not exceed an E. coli count of 126 Colony Forming Units (CFU) per 100 milliliters (mL) and any single sample shall not exceed an E. coli count of 235 CFU per 100 mL.

Comment 3:

The importance of the Bad River and Lake Superior to our way of life here in Northern Wisconsin should not be underestimated. Beaches downstream from the Bad River Band facility have been closed due to excessive E.coli levels, and uncertainty remains about the quality of our water thanks to this facility's ongoing violations.

**EPA Response:** 

We do not believe the discharge from the Bad River WWTP is the sole cause of any beach closings in the area, but it may be a contributor. The Bad River Natural Resources Department (BRNRD) initiated E. coli monitoring in 2001 at surface water locations distributed throughout the Bad River Watershed. Water samples are collected along the Bad River,

including 2 sites located downstream of the Tribe's Wastewater Treatment Plant (WWTP). The data was compared to the Tribe's E. coli standard for a single sample (235 CFU/100 mL). This is also EPA's criteria. Out of the 180 samples collected at these sites, from October 2007 through June 2012, only one sample exceeded the Tribe's E. coli standard. This exceedance occurred at the Elmhoist Road crossing, a site located upstream of the Tribe's WWTP discharge. During the same timeframe, elevated E. coli concentrations were also documented in the Marengo River, which empties into the Bad River upstream of the Elmhoist Road crossing; Elevated E. coli concentrations measured in the rivers and streams tend to be associated with runoff events. In addition, the data shows that non-point source pollution is occurring in the watershed. The Tribe has worked to identify E. coli problems within and upstream of the Reservation since 2001 (e.g. farming, stormwater, etc.). Reductions in sources of E. coli within the watershed are keys to helping the Tribe address the bacteria problem. To address these issues, the BRNRD has collaborated with partners to implement projects that improve land management while resolving water quality impacts. One example is partnering with the Bad River Watershed Association and others to develop a Marengo River Watershed Action Plan, a plan recently approved by EPA. Projects aligned with this plan are already being implemented, improving watershed health. In addition, starting in July 2011, the BRNRD expanded the E. coli monitoring to tribal beaches, through a Chequamegon Bay Area Partnership\* project funded by the Great Lakes Restoration Initiative. Two beaches bordering the mouth of the Bad River were monitored on a weekly basis between July and October 2011 and May through July 2012. At each site, the E. coli concentration exceeded the Tribe's standard once (one associated with the large storm event in June 2012); both of these exceedances corresponded with elevated E. coli levels measured upstream in the Marengo River.

In addition to the ongoing work by the BRNRD to identify sources, EPA issued a compliance plan with the objective to return the WWTP to compliance with current and future NPDES permits. The compliance plan describes the actions required to return compliance.

#### Comment 4:

Please let me know how it is possible that the EPA would even consider a re-issuance of a discharge permit for the Bad River Band of Lake Superior Chippewa when so many violations have been exposed? Until the Band can demonstrate they are capable of meeting limits set forth by Clean Water Act, and the general public has assurance that these will be met, no permit should be granted.

## **EPA Response:**

At this time, the current permits remain in effect because timely renewal applications were received and the Clean Water Act (CWA) allows the continuation of existing permits where a renewal application was received within the timeframe of CWA requirements. EPA intends to reissue the permits incorporating current regulations and water quality standards. The proposed draft permits include additional monitoring and operation and maintenance requirements not required by the existing permits. This

includes monitoring for sulfates and mercury and development and implementation of a preventative maintenance program to help the facility maintain compliance. In addition, EPA issued a compliance plan with the objective to return the WWTP to compliance with current and future NPDES permits. The compliance plan describes the actions required to return to compliance.

Comment 5:

How can EPA issue/renew a permit to a facility that has been out of compliance?

**EPA Response:** 

While EPA can issue a notice of intent to deny a new NPDES permit when a permittee is not in compliance with the conditions of its expired permit (see 40 C.F.R. § 122.6(c)(2)), EPA believes this is not appropriate here, where the Tribe will continue to need to treat its sewage. As long as the permit ensures that the discharge will meet CWA requirements when the facility meets the conditions of the permit, EPA believes permit reissuance is appropriate. EPA may choose, however, to enforce the conditions of the permit, as it has in this situation through the issuance of the compliance plan.

Comment 6:

Given the permit noncompliance, especially the E. coli sample results, are the facilities adequate to protect water quality? Do they need more treatment?

**EPA Response:** 

The tribe is in the process of upgrading its facilities so that it can comply with the permit requirements. The permits are written to protect water quality. The upgrades include, but are not limited to, rehabbing the process controls and getting the equalization tank back on line.

It should be noted that elevated levels of E. coli may persist in the streams and by beaches, even after the Tribe complies with its permit requirements for E. coli. As noted above, this could be due to elevated E. coli levels measured upstream in the Marengo River and in the river associated with runoff events and non-point source pollution in the watershed.

Comment 7:

EPA should table for two years the issuing of the NPDES permits to Bad River WWTPs until after scientific data is obtained by GTAC and verified by appropriate State and Federal Agencies.

**EPA Response:** 

Data collected by GTAC as part of the mining requirements has no bearing on the issuance of the Tribe's permits. As stated previously, the proposed draft permits incorporate current regulations and water quality standards; include additional monitoring and operation and maintenance requirements not required by the existing permits. This includes monitoring for sulfates and mercury and development and implementation of a preventative maintenance program to help the facility maintain compliance. As new data becomes available, EPA, if necessary, may modify these permits.

Comment 8:

In regards to issuing a new permit to the Bad River Band, I would first like to know if they rectified the problem that they were having with

their treatment plants? If not, why are we even talking about said issue?

**EPA Response:** 

As noted above, EPA issued a compliance plan to the Tribe's WWTPs with the objective to return them to compliance with current and future NPDES permits. The compliance plan describes the actions required to return compliance.

Comment 9:

Were they even fined for their violations (42 times) in a 57 month period? If not WHY? I can't believe that the EPA, would knowingly let the tribes pollute Lake Superior without any consequences.

**EPA Response:** 

Because of the trust relationship between the federal government and federally recognized Indian tribes, EPA policy directs the agency to work cooperatively with a Tribe and seek alternatives where a tribally owned facility is out of compliance with Federal environmental statutes. EPA has been providing compliance assistance to the Tribe. Despite these efforts, the Tribe's wastewater treatment facilities continue to have effluent violations. EPA's enforcement policy for Indian country allows the agency to seek informal resolution of compliance issues at tribally owned and operated facilities as a first step to address violations. Consistent with that policy, EPA issued a compliance plan to bring the Tribe's facilities back into compliance. If the facility does not come into compliance, EPA will assess the Band's progress and the reasons for failure to meet the compliance schedule and then determine whether additional enforcement is needed. EPA has the authority to take formal action, such as issue an administrative order, seek penalties, etc.

Comment 10:

Please do not issue any further sanitation permits to the Bad River Wastewater Treatment Plant unless they have corrected problems with their wastewater treatment plant.

**EPA Response:** 

Please see EPA response to comment 4.

Comment 11:

I'm appalled that EPA has not been more aggressive in ensuring that the NPDES limits from the "Tribe's" facilities are met. To allow limits to be exceeded 42 times without aggressive action from the EPA is unwarranted. The schedule for compliance is appropriate; however the EPA needs to take aggressive actions if the schedule and ultimate compliance isn't met.

**EPA Response:** 

Thank you for recognizing EPA's efforts. EPA's enforcement policy for Indian country allows the agency to seek informal resolution of compliance issues at tribally owned and operated facilities as a first step to address violations. If a facility does not come into compliance, EPA would assess the Band's progress and the reasons for failure to meet the compliance schedule and then determine whether additional enforcement is needed. EPA has the authority to take formal action, such as issue an administrative order, seek penalties, etc.

Comment 12:

We urge EPA to ensure that the draft WWTP has sufficiently stringent phosphorus limits to ensure the discharge does not contribute to a violation of downstream water quality standards, including the 0.005 mg/L phosphorus standards for Lake Superior.

**EPA Response:** 

The Tribe provided CWA section 401 certification that the draft permit conditions comply with their federally-approved water quality standards. Phosphorus data collected by the Tribe just below the discharge in the Bad River from July 2007-June 2012 averages 0.046 mg/L. This would comply with the state's river standard of 0.1 mg/L if it was applicable. Regarding the Lake Superior standard, we do not believe the discharge causes a violation of the standard. The Wisconsin Department of Natural Resources, with assistance from EPA, is developing a model for Great Lakes discharges that will be used to calculate phosphorus limits protective of the standards. Until the model is ready to be used, EPA used best professional judgment in setting the limit. When the model is complete, the permit can be modified or reissued if more stringent limits are appropriate.

The WWTP permit includes a monthly average limit for phosphorus of 1.0 mg/L. Because of operational problems at the WWTP, the proposed limit is what can be reasonably achieved. The Tribe is in the process of correcting the operational problems. This should further reduce phosphorus levels being discharged. We have also included a new condition to the permit that requires the submittal of an operational evaluation report that includes but is not limited to, effluent data evaluation and possible source reduction measures that will help optimize reductions in phosphorus discharges.

It should be noted that phosphorus data collected by the Tribe at the mouth of the Bad River from July 2007-August 2009 averages 0.036 mg/L of phosphorus. If you allow a conservative lake dilution of 10 to 1, the discharge from the Bad River, including the WWTP discharge, would meet the Lake Superior standard.

Comment 13:

The ongoing violations of the Bad River WWTP which have resulted in high levels of E. coli being found on the beaches of Lake Superior are unacceptable.

**EPA Response:** 

Please see responses to comment 3.

Comment 14:

Please do not renew this permit until it can be shown that this facility is in full compliance with the law and there is a reasonable expectation that they will continue to be in compliance in the future.

**EPA Response:** 

Please see responses to comment 4.

Comment 15:

Since the facilities for Diaperville and Birch Hill are pond systems without influent measuring devices, monitoring influent flow "continuously" is not possible. At Diaperville, influent flow is

determined by using lift station pump run times and calibration of the lift station pumps. At Birch Hill, the influent flow is estimated based on a percentage of the water produced at the pumphouse.

## **EPA Response:**

EPA only intended that a total daily influent flow be recorded as indicated in the table on page 6 of the permits. The use of calibrated lift station pumps and lift station pump run times to estimate influent flow is appropriate on a daily basis as is using a percentage of the drinking water produced at the pumphouse. EPA has clarified the permit conditions in the final permits.

# **Public Hearing Comment Summary and Response**

### Comment 1:

While several people provided oral comments on the record at the public hearing, there were no substantive comments on the issuance of the permits or on the conditions of the draft permits. No one stated that the permits should not be issued or that any condition of the draft permits was inadequate or should be changed.

Several tribal members spoke at the hearing including Tribe's Chairman, who described the Band's commitment to a healthy Bad River watershed and stated that the Band will work hard to maintain its sewer systems for the future of the tribe and all the people. A Bad River Elder stated that she was surprised to learn of the previous permit violations, but believed that the tribe was taking steps to fix any problems.

One community member stated that Lake Superior was very important to him, recounted some of the permit violations, and urged all parties involved to "make the problem go away."

## EPA response:

EPA appreciates the concern for the water quality of the Bad River watershed and Lake Superior voiced by the people who spoke at the public hearing, and believes that the conditions imposed by the permits on the Band's wastewater treatment facilities are an integral part of protecting water quality.